REMARKS

Examiner J. Maldonado is thanked for the thorough examination and search of the subject Patent Application.

All Claims are believed to be in condition for Allowance and that is so requested.

Reconsideration of the rejection under 35 U.S.C. 103 of Claims 1-21 as being unpatentable over Mouroux in view of Erhardt et al and Ishida is requested in accordance with the following remarks.

It is agreed that Mouroux teaches a method of forming C40 and then C54 titanium silicide, including depositing titanium directly over the silicon regions as shown in Fig. 9. However, Mouroux requires the presence of a refractory metal such as Mo to form the C40 phase. This can be in the form of a refractory metal layer underlying the titanium, refractory metal implanted into the silicon regions, or an alloy of a refractory metal with the titanium. On page 15 where Mouroux discusses the thickness of the titanium layer, she states that a refractory metal layer is "introduced as a thin interposed layer ... between the Si and substrate and the Ti films." Thus, the titanium layer is not deposited

"directly overlying said silicon regions to be silicided" as claimed in Applicants' Claims 1, 8, and 15.

Applicants' detailed Claimed invention does not use a refractory metal in forming the C40 phase $TiSi_2$. It is the laser annealing that forms the C40 phase in Applicants' claimed invention. Laser annealing is not taught or suggested by Mouroux since Mouroux requires the presence of a refractory metal to form the C40 phase $TiSi_2$. Ishida teaches laser annealing to form C49 phase $TiSi_2$ (col. 4, lines 5-18). Mouroux teaches forming C54 $TiSi_2$ by first forming a C40 phase silicide layer incorporating a refractory metal (see, for example, the summary on page 40). It is agreed that Erhardt et al teach laser annealing as an alternative to RTA or furnace annealing. However, Erhardt et al does not disclose a second annealing to change the phase of the silicide formed in the first annealing. Erhardt et al does not recognize the necessity of formed a C54 phase titanium disilicide. There would be no motivation to combine the laser annealing of Ishida which forms phase C49 silicide with Mouroux which forms phase C40 silicide. Neither reference has an understanding of the possibility of forming phase C40 silicide using laser annealing. Thus, it is not agreed that Applicants' claimed invention is obvious in view of the combination of references.

Reconsideration of the rejection under 35 U.S.C. 103 of Claims 1-21 as being unpatentable over Mouroux in view of Erhardt et al and Ishida is requested in accordance with the remarks above.

Allowance of all Claims is requested.

It is requested that should Examiner Maldonado not find that the Claims are now Allowable that he call the undersigned at 765 4530866 to overcome any problems preventing allowance.

Respectfully submitted,

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